

CLAIMS

1. An electric power steering apparatus comprising:

a steering wheel;

5 a rack shaft to be connected to vehicle wheels, said rack shaft being connected to said steering wheel through a steering shaft and a rack-and-pinion mechanism;

a first electric motor for producing a motive power to be applied to said steering shaft or between said steering shaft and
10 said rack-and-pinion mechanism; and

a second electric motor for producing a motive power to be applied to said rack shaft.

2. An electric power steering apparatus comprising:

15 a steering wheel;

a rack shaft to be connected to vehicle wheels, said rack shaft being connected to said steering wheel through a steering shaft and a rack-and-pinion mechanism; and

two electric motors positioned adjacent and connected to
20 said rack shaft through transmission mechanisms and a ball screw.

3. An electric power steering apparatus comprising:

a steering wheel;

a rack shaft to be connected to vehicle wheels, said rack
25 shaft being connected to said steering wheel through a steering shaft, a pinion shaft and a rack-and-pinion mechanism having a pinion formed on said pinion shaft; and

- 40 -

two electric motors for producing motive powers to be applied to said pinion shaft, said two electric motors being connected to said pinion shaft with said pinion positioned therebetween.

5 4. An electric power steering apparatus comprising:

a steering wheel;

a rack shaft to be connected to vehicle wheels, said rack shaft being connected to said steering wheel through a steering shaft;

10 a pinion shaft connected to said rack shaft through a rack-and-pinion mechanism;

a first electric motor for producing a motive power to be applied to said pinion shaft; and

15 a second electric motor for producing a motive power to be applied to said rack shaft through a ball screw.